AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently Amended) A method for enabling establishment of a connection between a node of ~~an inside address realm~~ a private domain and a node of ~~an outside address realm~~ a public domain through an intermediate communication gateway having a pool of ~~outside realm~~ public-domain gateway addresses for ~~outside realm~~ public-domain representation of ~~inside realm~~ private-domain nodes, said method comprising the steps of:

centrally allocating by the intermediate communication gateway, in response to a configuration request initiated from ~~said inside realm~~ the private-domain node, ~~an outside realm~~ a public-domain gateway address from said pool of gateway addresses and ~~an inside node~~ a private-domain port number for ~~said inside realm~~ the private-domain node;

wherein said step of centrally allocating comprises the step of identifying, based on predetermined connection information derivable from said configuration request, ~~an outside realm~~ a public-domain gateway address and ~~an inside node~~ a private-domain node port number that in combination with said predetermined connection information define ~~an outside realm~~ a public-domain gateway state representation that has no counterpart in any existing gateway connection state;

initiating establishment of said connection by the intermediate communication gateway at least partly based on the allocated ~~outside realm~~ public-domain gateway address and ~~inside node~~ private-domain node port number; and

transmitting the allocated ~~outside realm~~ public-domain gateway address and ~~inside node~~ private-domain node port number from the intermediate communication gateway to the requesting ~~inside realm~~ private-domain node in a configuration reply.

2. (Currently Amended) The method according to claim 1, wherein said predetermined connection information includes at least one of ~~outside~~ public-domain node address information and ~~outside~~ public-domain node port information.

3. (Currently Amended) The method according to claim1, wherein a gateway connection state is established in said gateway based on said ~~outside-realm~~ public-domain gateway state representation and a representation of ~~an inside-realm~~ a private-domain routing path between said gateway and said ~~inside-realm~~ private-domain node.

4. (Currently Amended) The method according to claim 1, wherein the allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number are represented by an allocated socket domain address and a source port number, and the predetermined connection information includes a destination domain address and a destination port number, and the ~~outside-realm~~ public-domain gateway state representation is defined by a unique set of socket parameters including the allocated socket domain address and source port number, the destination domain address and the destination port number.

5. (Original) The method according to claim1, wherein said configuration reply is a DNS (Domain Name Server) reply.

6. (Currently Amended) The method according to claim 5, wherein said allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number are conveyed in a dedicated DNS record in said DNS reply.

7. (Currently Amended) The method according to claim 1, further comprising the step of ~~said inside-realm~~ the private-domain node configuring a communication interface according to said allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number.

8. (Currently Amended) The method according to claim 1, further comprising the step of establishing ~~an inside realm~~ a private-domain routing path between said gateway and said ~~inside realm~~ private-domain node.

9. (Currently Amended) A system for enabling establishment of a connection between a node of ~~an inside address realm~~ a private domain and a node of ~~an outside address realm~~ a public domain through an intermediate communication gateway having a pool of ~~outside realm~~ public-domain gateway addresses for ~~outside realm~~ public-domain representation of ~~inside realm~~ private-domain nodes, said system comprising:

means within the intermediate communication gateway for centrally allocating, in response to a configuration request initiated from ~~said inside realm~~ the private-domain node, ~~an outside realm~~ a public-domain gateway address from said pool of gateway addresses and ~~an inside node~~ a private-domain node port number for ~~said inside realm~~ the private-domain node;

wherein said means for centrally allocating comprises means for identifying, based on predetermined connection information derivable from said configuration request, ~~an outside realm~~ a public-domain gateway address and ~~an inside node~~ a private-domain node port number that in combination with said predetermined connection information define ~~an outside realm~~ a public-domain gateway state representation that has no counterpart in any existing gateway connection state;

means within the intermediate communication gateway for initiating establishment of said connection at least partly based on the allocated ~~outside realm~~ public-domain gateway address and ~~inside node~~ private domain node port number; and

means for transmitting the allocated ~~outside realm~~ public-domain gateway address and ~~inside node~~ private-domain node port number from the intermediate communication gateway to the requesting ~~inside realm~~ private-domain node in a configuration reply.

10. (Currently Amended) The system according to claim 9, wherein said predetermined connection information includes at least one of ~~outside~~ public-domain node address information and ~~outside~~ public-domain node port information.

11. (Currently Amended) The system according to claim 9, wherein a gateway connection state is established in said gateway based on said ~~outside-realm~~ public-domain gateway state representation and a representation of ~~an inside-realm~~ a private-domain routing path between said gateway and said ~~inside-realm~~ private-domain node.

12. (Currently Amended) The system according to claim 9, wherein the allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number are represented by an allocated socket domain address and a source port number, and the predetermined connection information includes a destination domain address and a destination port number, and the ~~outside-realm~~ public-domain gateway state representation is defined by a unique set of socket parameters including the allocated socket domain address and source port number, the destination domain address and the destination port number.

13. (Original) The system according to claim 9, wherein said configuration reply is a DNS (Domain Name Server) reply.

14. (Currently Amended) The system according to claim 13, wherein said allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number are conveyed in a dedicated DNS record in said DNS reply.

15. (Currently Amended) The system according to claim 9, further comprising means for establishing ~~an inside-realm~~ a private-domain routing path between said gateway and said ~~inside-realm~~ private-domain node.

16. (Currently Amended) A gateway resource manager for a communication gateway, said communication gateway having a pool of ~~outside-realm~~ public-domain gateway addresses for ~~outside-realm~~ public-domain representation of ~~inside-realm~~ private-domain nodes, said gateway resource manager comprising:

means for centrally allocating, in response to a configuration request initiated from one of the ~~inside-realm~~ private-domain nodes, ~~an outside-realm~~ a public-domain gateway address from said pool of gateway addresses and ~~an inside-node~~ a private-domain node port number to be used in establishing a gateway connection state for a flow between the ~~inside-realm~~ private-domain node and ~~an outside-realm~~ a public-domain node;

wherein said allocating means comprises means for identifying, based on predetermined connection information, ~~an outside-realm~~ a public-domain gateway address and ~~an inside-node~~ a private-domain node port number that in combination with said predetermined connection information define ~~an outside-realm~~ a public-domain gateway state representation that has no counterpart in any existing gateway connection state;

means for initiating establishment of said gateway connection state at least partly based on the allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private domain node port number; and

means for transmitting the allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number to said ~~inside-realm~~ private-domain node.

17. (Currently Amended) The gateway resource manager according to claim 16, wherein said predetermined connection information includes at least one of ~~outside~~ public-domain node address information and ~~outside~~ public-domain node port information.

18. (Currently Amended) The gateway resource manager according to claim 16, wherein the allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number are represented by an allocated socket domain address and a source port number, and the predetermined connection information includes a destination domain address and a destination port number, and the ~~outside-realm~~ public-domain gateway state representation is defined by a unique set of socket parameters including the allocated socket domain address and source port number, the destination domain address and the destination port number.

19. (Currently Amended) The gateway resource manager according to claim 16, wherein said means for initiating establishment of said gateway connection state comprises means for requesting that said gateway establishes a gateway connection state based on ~~said outside-realm~~ the public-domain gateway state representation and a representation of ~~an inside-realm~~ a private-domain routing path between said gateway and said ~~inside-realm~~ private-domain node.

20. (Currently Amended) The gateway resource manager according to claim 16, wherein said allocating means performs allocation in response to a configuration request initiated from ~~said inside-realm~~ the private-domain node, and said transmitting means transmits the allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number to ~~said inside-realm~~ the private-domain node in a configuration reply.

21. (Original) The gateway resource manager according to claim 20, wherein said configuration reply is a DNS (Domain Name Server) reply.

22. (Currently Amended) The gateway resource manager according to claim 21, wherein said allocated ~~outside-realm~~ public-domain gateway address and ~~inside-node~~ private-domain node port number are conveyed in a dedicated DNS record in said DNS reply.

23. (Currently Amended) A method of configuring ~~an inside realm~~ a private-domain communication node for communication with ~~an outside realm~~ a public-domain communication node via a communication gateway having a pool of ~~outside realm~~ public-domain gateway addresses for ~~outside realm~~ public-domain representation of ~~inside realm~~ private-domain nodes, said method comprising the steps of:

centrally allocating by the intermediate communication gateway, ~~an outside realm~~ a public-domain gateway address from said pool of gateway addresses and ~~an inside node~~ a private-domain node port number in response to a configuration request initiated from ~~said inside realm~~ the private-domain node;

wherein said step of centrally allocating comprises the step of identifying, based on predetermined connection information, ~~an outside realm~~ a public-domain gateway address and ~~an inside node~~ a private-domain node port number that in combination with said predetermined connection information define ~~an outside realm~~ a public-domain gateway state representation that has no counterpart in any existing gateway connection state;

transmitting the allocated ~~outside realm~~ public-domain gateway address and ~~inside node~~ private-domain node port number from the intermediate communication gateway to ~~said inside realm~~ the private-domain node; and

configuring ~~said inside realm~~ the private-domain communication node according to the allocated ~~outside realm~~ public-domain gateway address and ~~inside node~~ private-domain node port number.

24. (Currently Amended) ~~An inside realm~~ A private-domain communication terminal arranged for communication with any of a number of ~~outside realm~~ public-domain hosts via a communication gateway having a pool of ~~outside realm~~ public-domain gateway addresses for enabling ~~outside realm~~ public-domain representation of inside-realm communication terminals, said communication terminal comprising:

means for requesting from the communication gateway, in a modified DNS (Domain Name Server) query, central configuration information for communication with

a selected one of ~~said outside realm~~ th e public-domain hosts, wherein the central configuration information is centrally allocated by the communication gateway;

means for receiving a DNS configuration reply including a centrally allocated ~~outside realm~~ public-domain gateway address and a centrally allocated private-domain terminal port number, said centrally allocated ~~outside realm~~ public-domain gateway address and said centrally allocated private-domain terminal port number being arranged in a dedicated DNS record in said configuration reply; and

means for configuring a communication interface according to ~~said outside realm~~ the public-domain gateway address and said private-domain terminal port number.